

Amendments to the Specification

IN THE WRITTEN DESCRIPTION

Please replace the paragraph beginning at page 2, line 3, with the following rewritten paragraph:

The vertical contour detecting stage 30 comprises the contour detecting filter 19a connected to the video signal input terminal 10 through 1 set of 1-dot delay circuit 11, the contour detecting filter 19b connected to the same through 1 set of 1-dot delay circuit and 1 set of 1-line delay circuit, the contour detecting filter 19c connected to the same through 1 set of 1-dot delay circuit 11 and 2 sets of 1-line delay circuit 12, the adding circuit 20 for outputting the sum of the outputs of the contour filters 19a, 19b and 19c, and the coefficient multiplying circuit for multiplying a predetermined coefficient K2. In other words, the vertical contour components are detected from the objective pixel and the pixel preceding the objective pixel by 1 dot and the pixel immediately following the objective pixel.

Please replace the paragraph beginning at page 3, line 14, with the following rewritten paragraph:

Since only 4 cases, namely, Y1, Y2, Y3 and Y4 are available even when processing by the vertical contour detecting stage 30, similarly to the cases described above, when the coefficient of the coefficient multiplying circuit 21 is given as $K2 = 1$, the output ~~of said~~ is as shown in Fig. 2(c).

Please replace the paragraph beginning at page 3, line 23, with the following rewritten paragraph:

Next, let's assume a case where the digital video signals representing a rightward-rising contours with the luminance [8] and the luminance [4] are inputted to the video signal

input terminal 10 of the a circuit having the conventional composition.

Please replace the paragraph beginning at page 6, line 3, with the following rewritten paragraph:

The present invention also relates to a contour emphasizing method, wherein, with respect to the contours represented by the digital video signals, in order to resolve not only the problem concerning the point where the horizontal contour and the vertical contour ~~interest~~intersect but also the problem concerning the point of the inclined contour, the luminance of the objective pixel and the luminance of one of the pixels adjacent to the objective pixel in the horizontal, vertical, rightward-rising and leftward-rising directions and differing most from the luminance of the objective pixel are weighted respectively to obtain the contour emphasizing values; a pixel adjacent to the present objective pixel is picked out as a new objective pixel, and this processing is repeated consecutively; when the signs of the two consecutive contour emphasizing values are the same, the contour emphasizing values preceding and following these two consecutive contour emphasizing values are adopted as they are, whereas when ~~he~~the signs of the two consecutive contour emphasizing values differ, the contour emphasizing values preceding and following the two consecutive contour emphasizing values are set to 0 by applying the inclined pixel optimizing processing; the contour emphasizing values, which have undergone the inclined pixel optimizing processing, are respectively added to the corresponding objective pixels.

Please replace the paragraph beginning at page 7, line 6, with the following rewritten paragraph:

Fig. 3 is a diagram showing the signals representing the contours extending in a diagonal direction, whose states varying according to different stages, inputted to the contour

emphasizing circuit of Fig. 1, wherein (a) is a diagram showing the original states of the digital signals inputted from the video signal input terminal 10; (b), a diagram showing the signals outputted from the video signal output terminal 23.

Please replace the paragraph beginning at page 8, line 6, with the following rewritten paragraph:

The present invention is designed so that only one contour emphasizing value, which is the largest of all the absolute values of the contour emphasizing values of the pixels corresponding to the contours lying in the horizontal, vertical, rightward-rising and leftward-rising directions around a specific pixel, is adopted to thereby prevent the contour emphasizing values for the intersection of the horizontal contour and the vertical contour and the point of inclined contour from being overemphasized and to obtain appropriate contour emphases for those contours which are not emphasized, thereby assuring a natural contour emphasis as the whole. In this way, the present invention is designed so that the contour emphasis at the intersection of the horizontal contour and the vertical contour and the inclined contour point will not be duplicated, or the contour lacking in necessary contour emphasis is emphasized properly for obtaining a more natural contour by processing the corresponding signals properly.

Please replace the paragraph beginning at page 10, line 23, with the following rewritten paragraph:

The A1, A2, A3, B1, B2, B3, C1, C2 and C3 are synchronized by means of the 1-dot delay circuit 11 and the 1-line delay circuit 12; the differences between the horizontal pixels B1 and B3, between the vertical pixels A2 and C2, between the rightward-rising pixels C1 and A3, and between the leftward-rising pixels A1 and C3 are detected

respectively; the absolute values of these differences are determined; a maximum value is determined from among these absolute values.

Please replace the paragraph beginning at page 12, line 6, with the following rewritten paragraph:

In the case of the first embodiment illustrated in Fig. 4, the contours in the horizontal direction and vertical direction can be emphasized without ~~problem~~problems, but there is the problem that the diagonal contour rather tends to be overemphasized.

Please replace the paragraph beginning at page 12, line 23, with the following rewritten paragraph:

This diagonal contour optimizing circuit 25 comprises 3 sets of 1-dot delay circuits 11 connected in series, a switching stage 27 inserted between a 1-dot delay circuit 11 and an adding circuit 20, a switching stage 28 inserted between a third 1-dot delay circuit 11 and the coefficient multiplying circuit 21, a sign comparator 26, for comparing ~~the signs~~the signs, connected to the output side of the first 1-dot delay circuit 11 and to the output side of the second 1-dot delay circuit 11 so that the switching stage 27 and the switching stage 28 can be controlled selectively in response to the output of the sign comparator.

Please replace the paragraph beginning at page 13, line 14, with the following rewritten paragraph:

In this case, the signs differ, i.e., the sign of a_2 being + while the ~~sign~~sign of a_3 being -, and thus the switching stage 27 and the switching stage 28 are set to 0 respectively. Thus, both a_1 and a_4 become 0, so that, as shown in Fig. 9(c), the contour emphasizing values $a_1 = 0$, $a_2 = +1$, $a_3 = -1$ and $a_4 = 0$ are obtained. Similarly, since where $a_1 = 0$, $a_2 = +1$, $a_3 = -1$ and $a_4 = 0$, the signs of a_2 and a_3

are same, $a_1 = 0$, $a_2 = +1$, $a_3 = +1$ and $a_4 = -1$ are outputted as they are, and also where $a_1 = +1$, $a_2 = -1$, $a_3 = -1$ and $a_4 = 0$. Since the signs of a_2 and a_3 are the same, $a_1 = +1$, $a_2 = -1$, $a_3 = -1$ and $a_4 = 0$ are outputted as they are.

Please replace the paragraph beginning at page 14, line 1, with the following rewritten paragraph:

Further, in the case of the above-mentioned embodiment, 9 pixels (3 x 3 pixels) are processed at a time, but the number of the pixels to be processed at a time is not limited thereto; for instance, 25 pixels (5 x 5 pixels) may be processed at a time. For example, when the pixels are grouped as A1-A5, B1-B5, C1-C5, D1-D5 and E1-E5, C3 is the central pixel; for the difference in the luminance in horizontal direction, the difference in luminance between C1 and C5 and the difference in luminance between C2 and C4 are detected. ~~And the~~The coefficients can be set, for example, to $-1/16$, $6/16$, $-2/16$ and $-1/16$, etc. In this case, all the 25 pixels are not subject to the calculation; 8 pixels A2, A4, B1, B5, D1, D5, E2 and E4 are not subject to detection, that is, the 17 pixels corresponding to the horizontal, vertical, rightward-rising and leftward-rising contours are subject to the calculation.